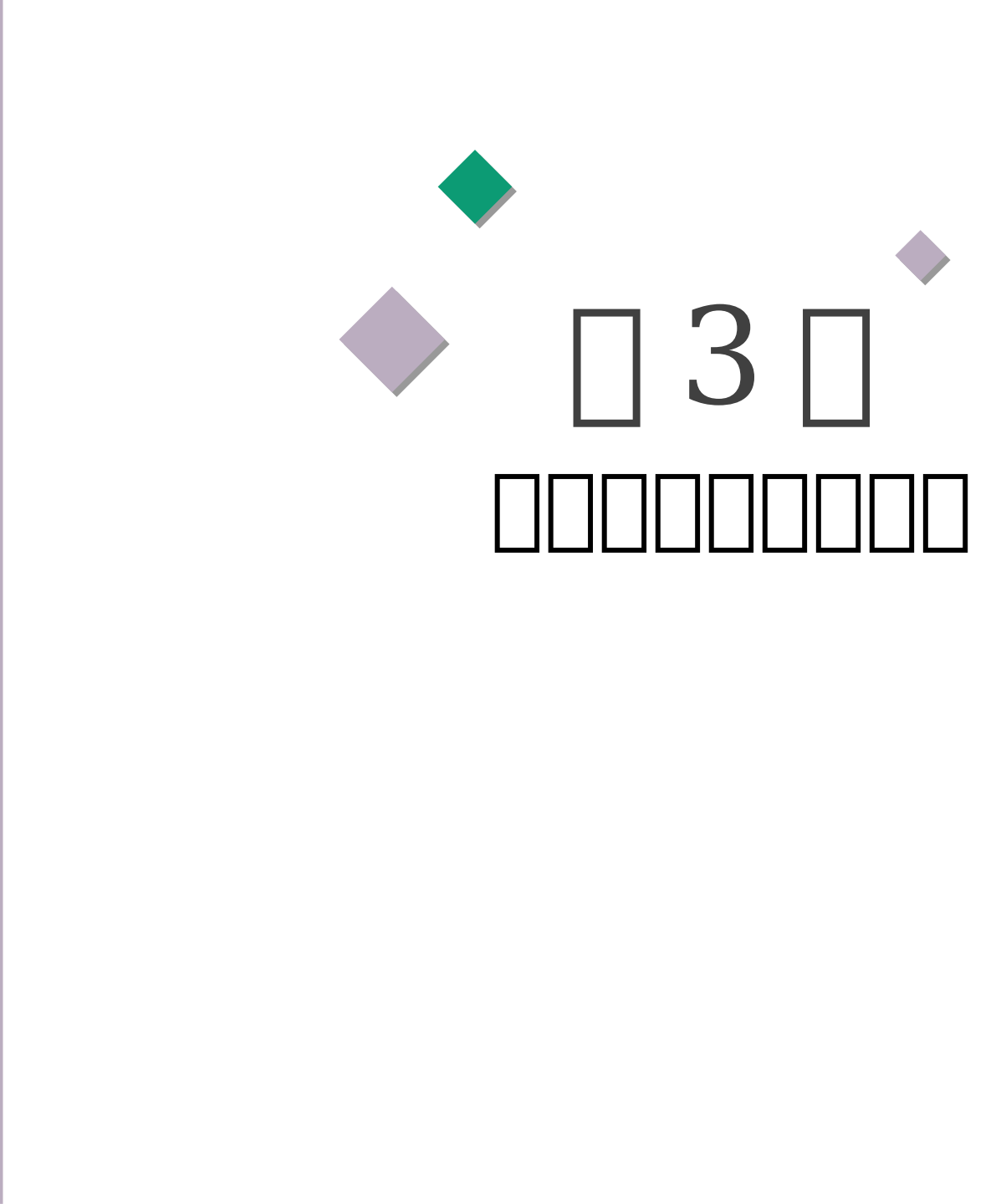
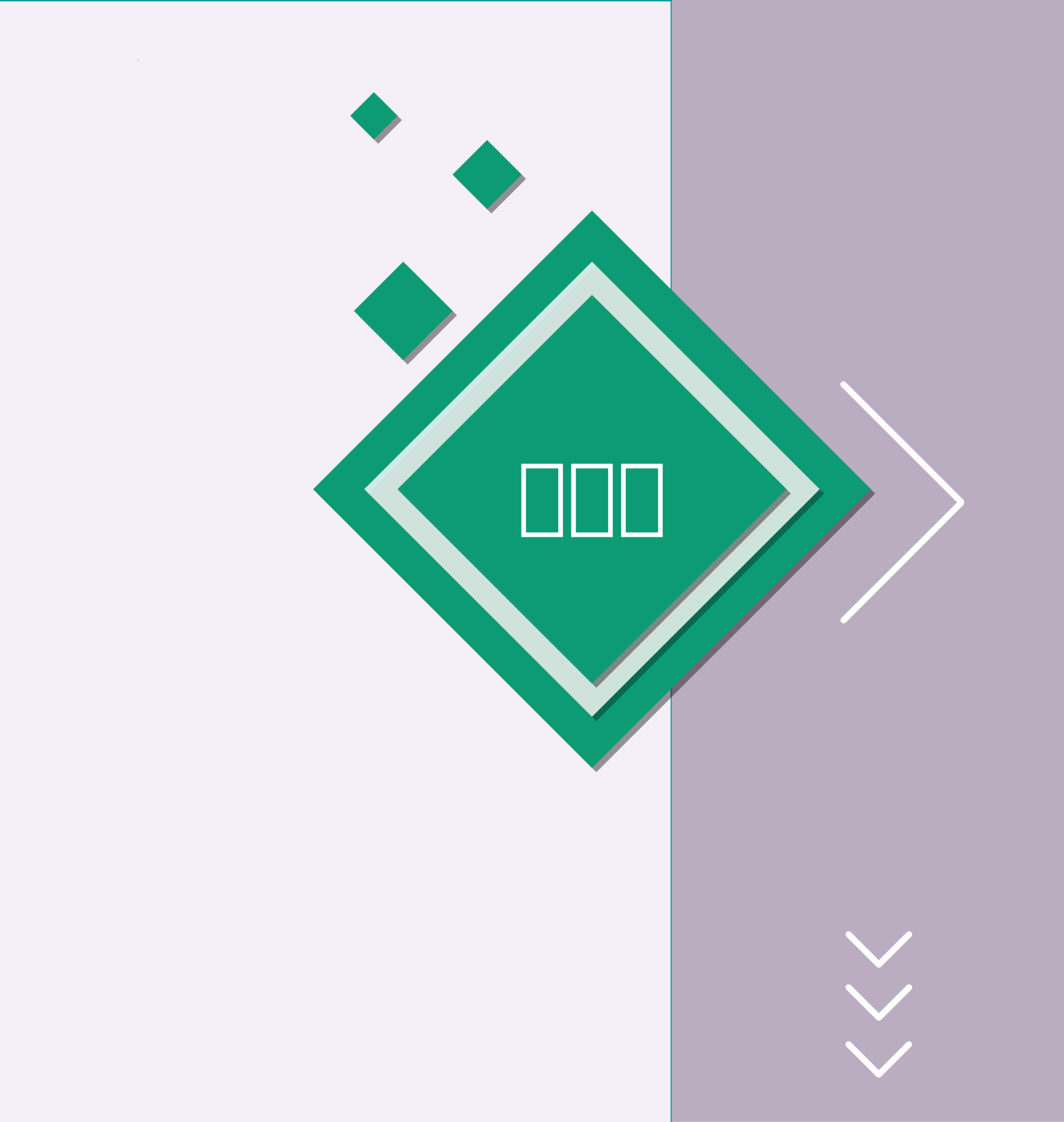
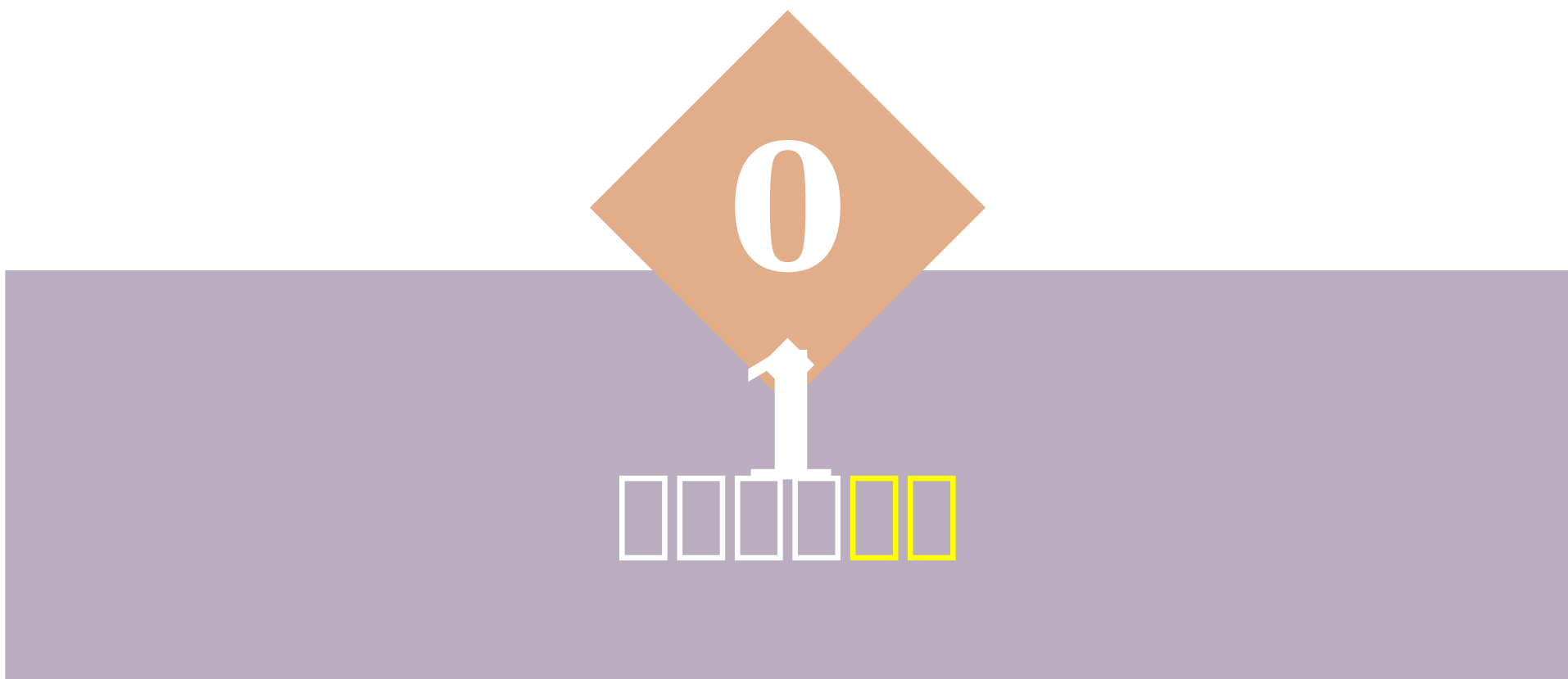








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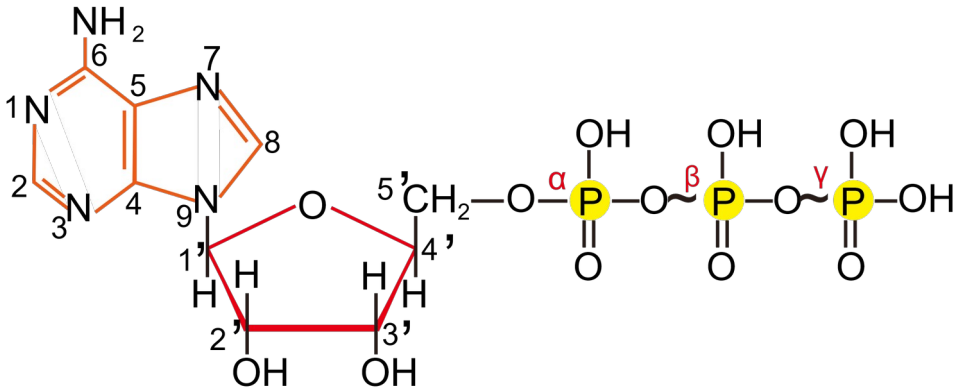
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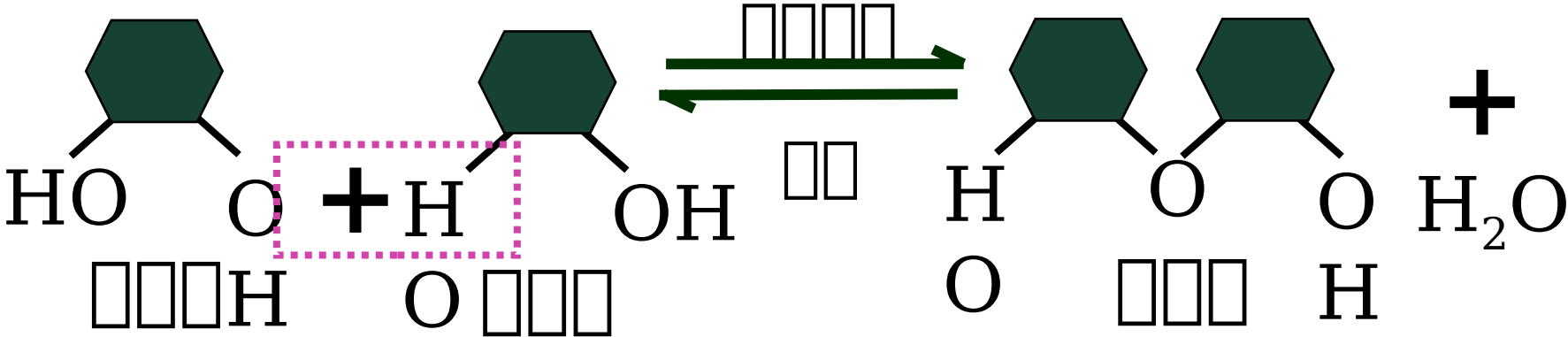


ATP □ P86 □

种类			分布	主要功能
单糖	五碳糖	□□	□□□□□	□□ RNA □ ATP
		□□□□	□□□□□	□□ DNA
	六碳糖	□□□	□□□□□	□□□□□□□
		□□	□□□□□□□□	□□□□
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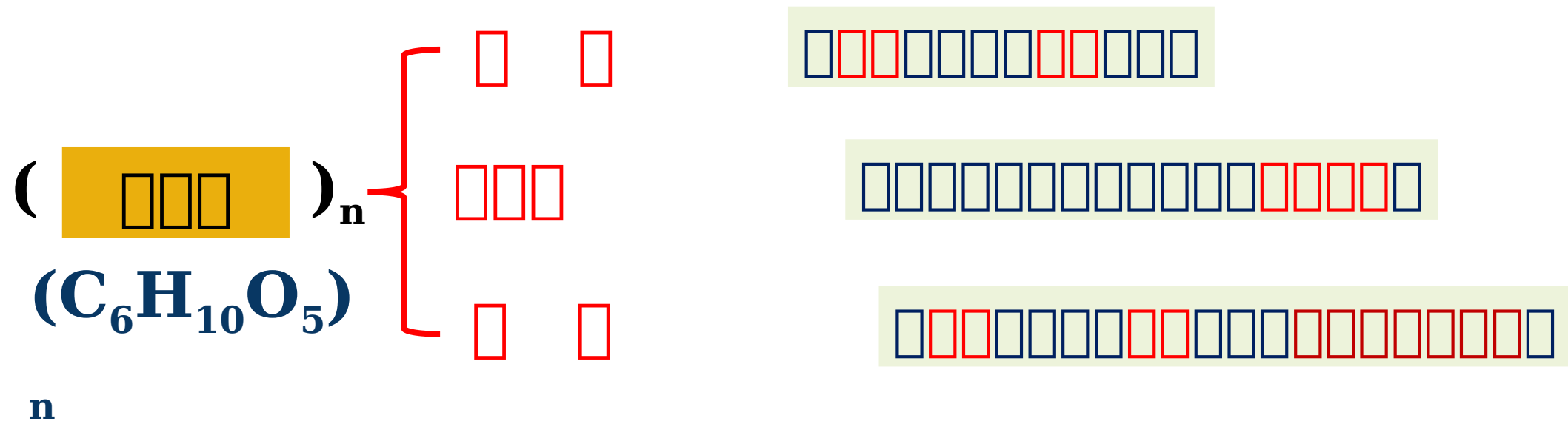
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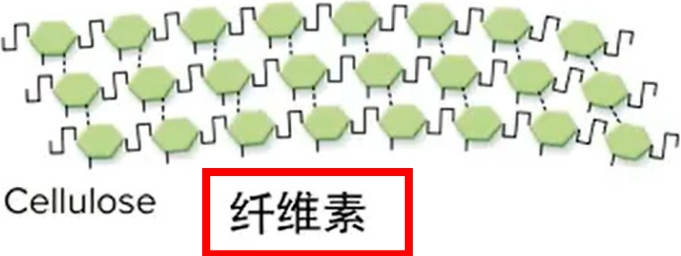
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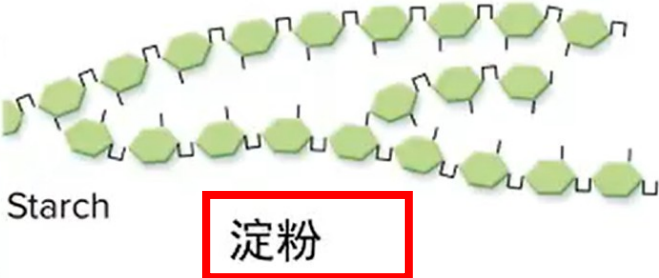
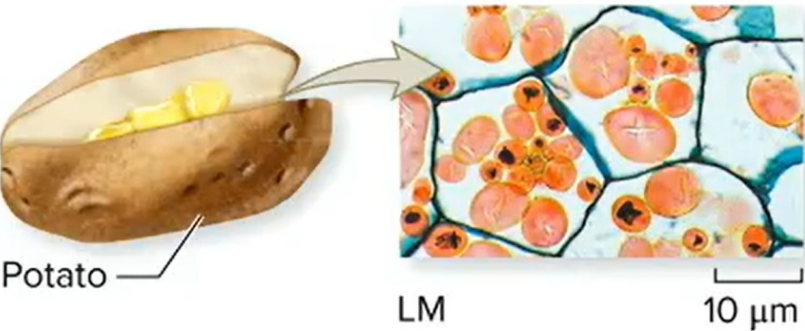
3. 植物

植物 3 植物

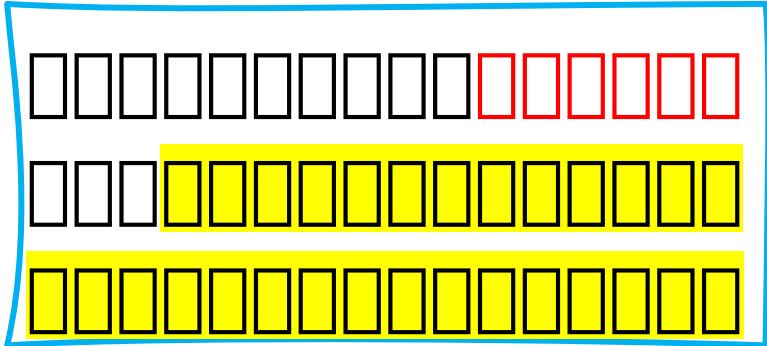
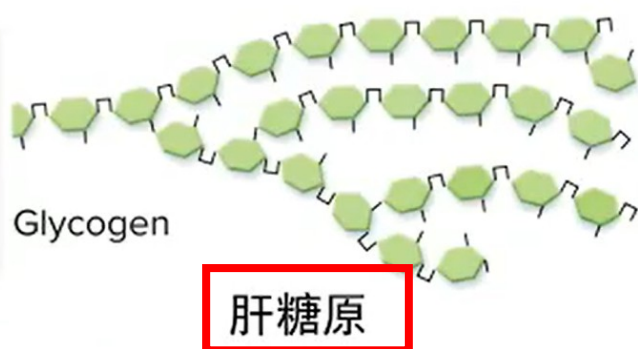
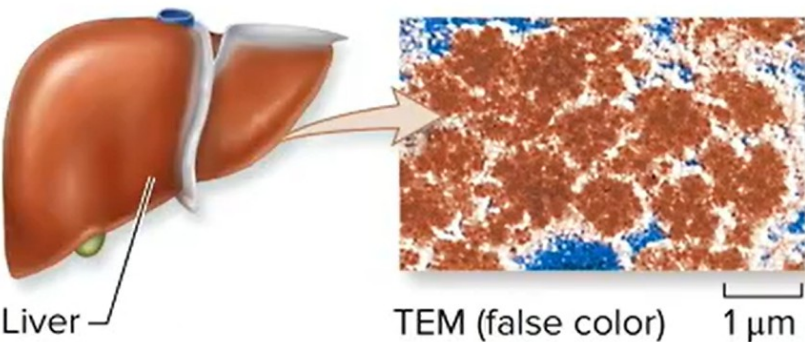
叶子



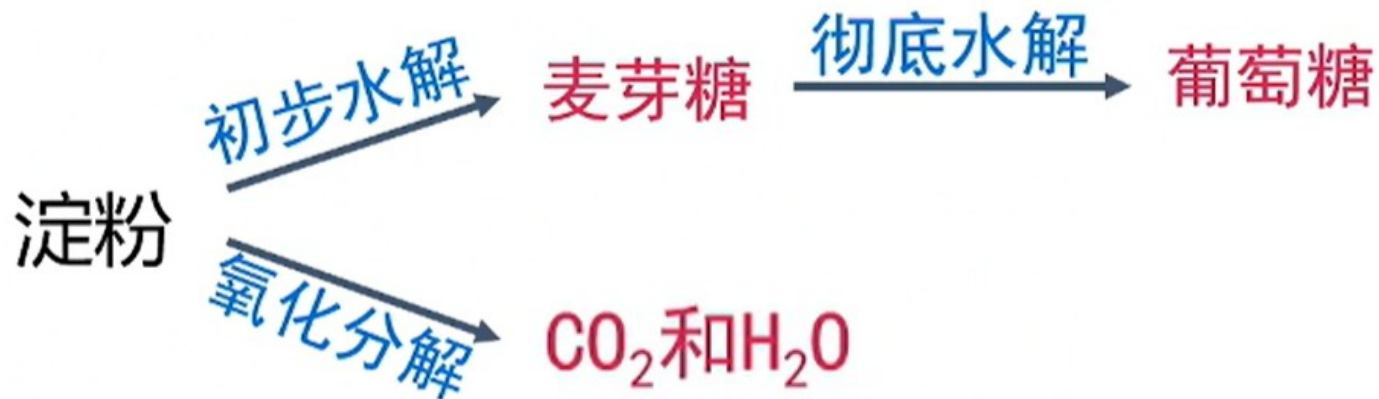
马铃薯



肝脏

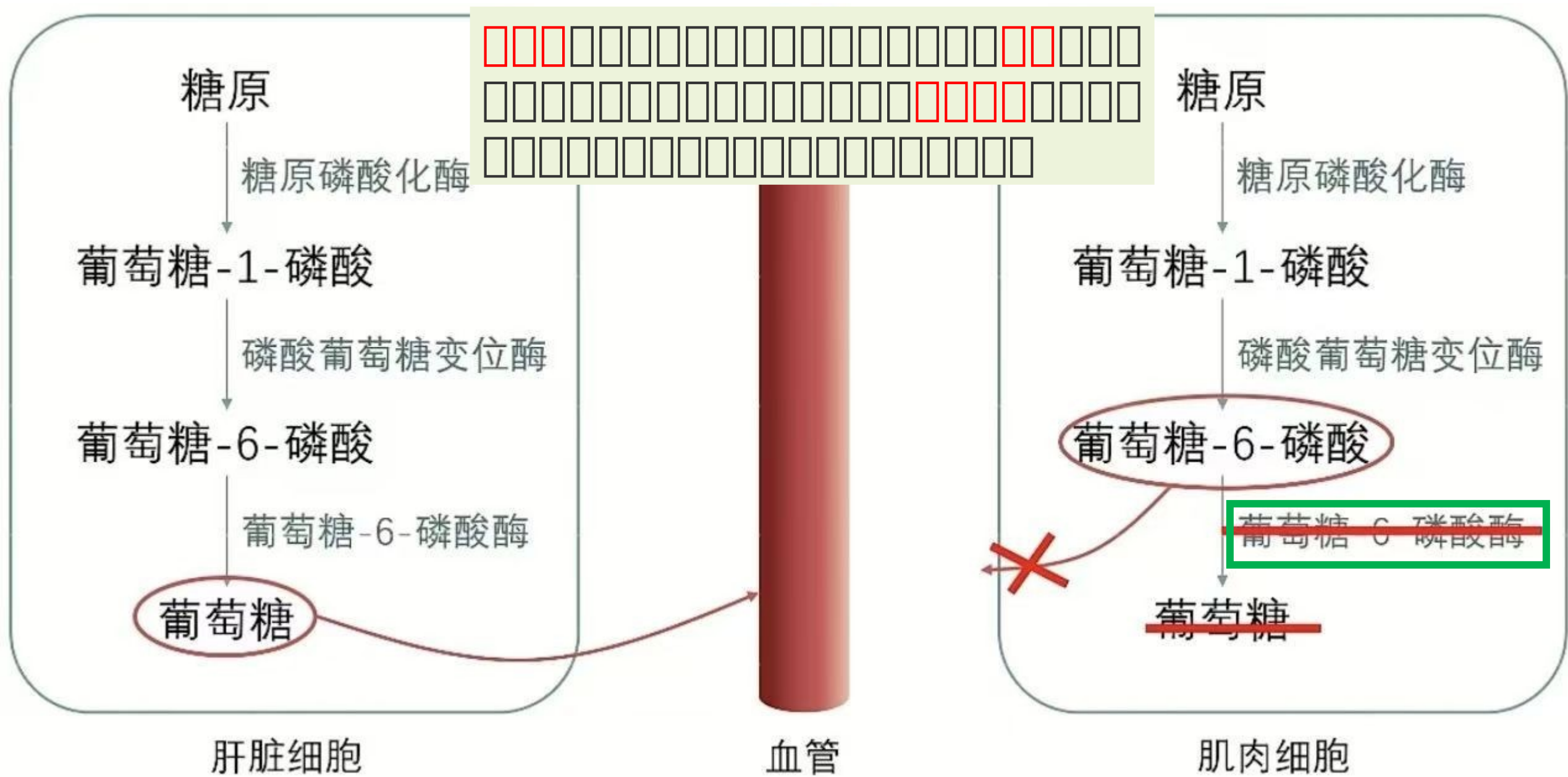


水解 VS 氧化分解



食物中的糖是如何成为人体细胞中的糖？

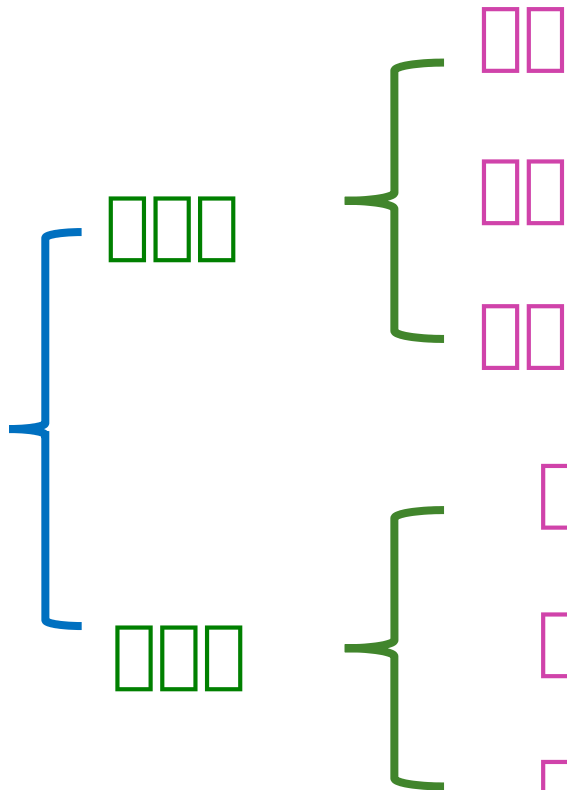






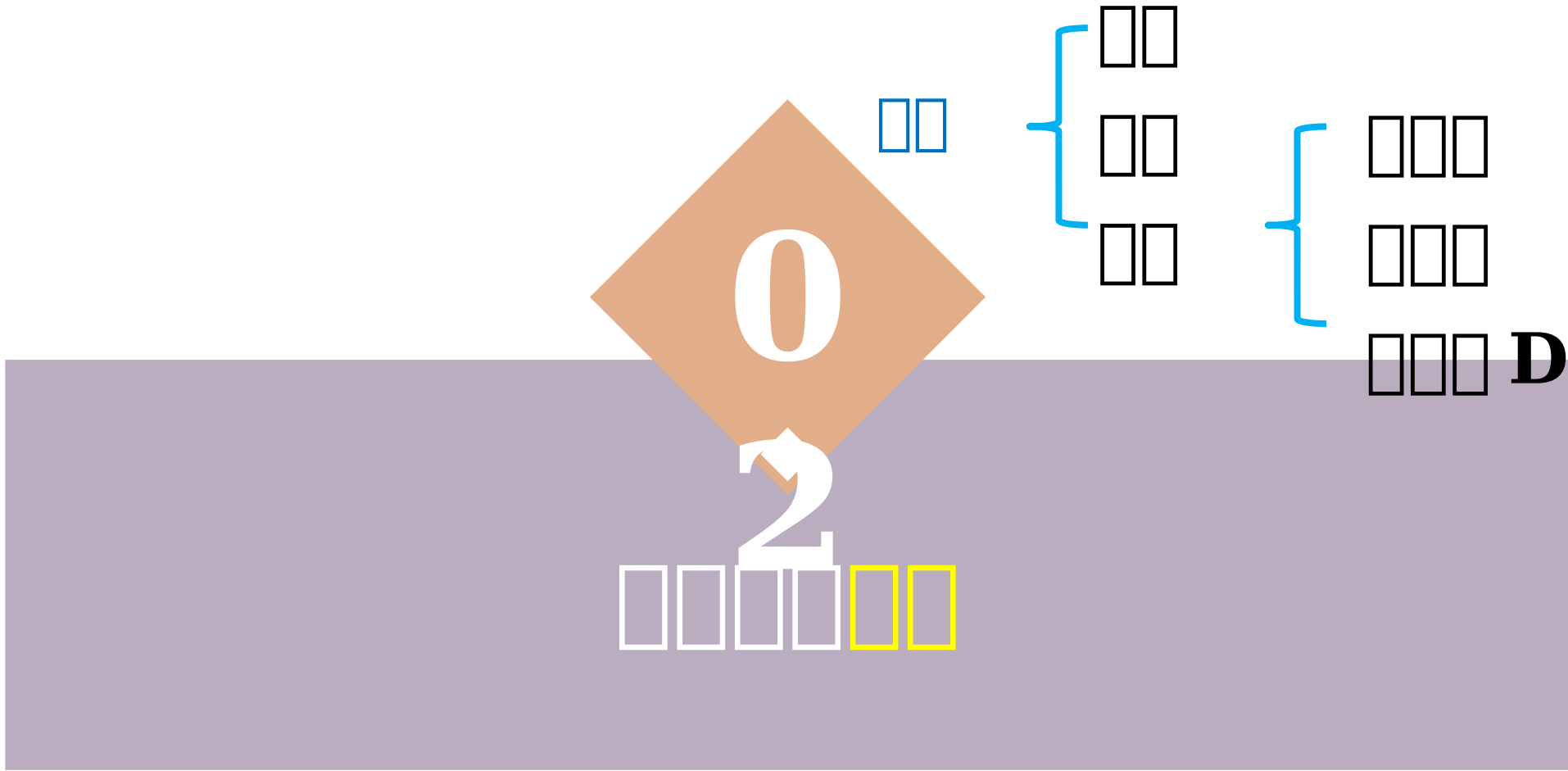
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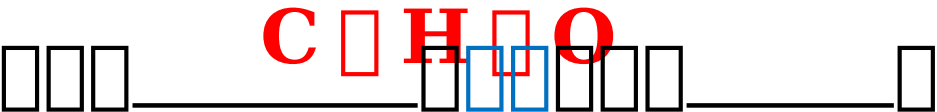
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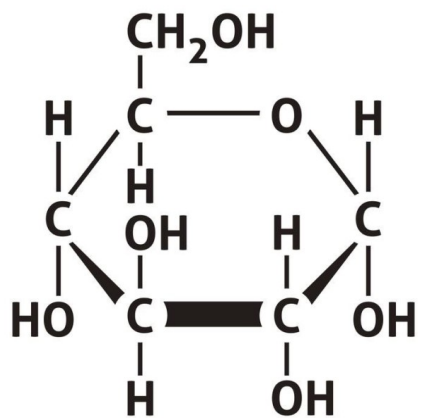
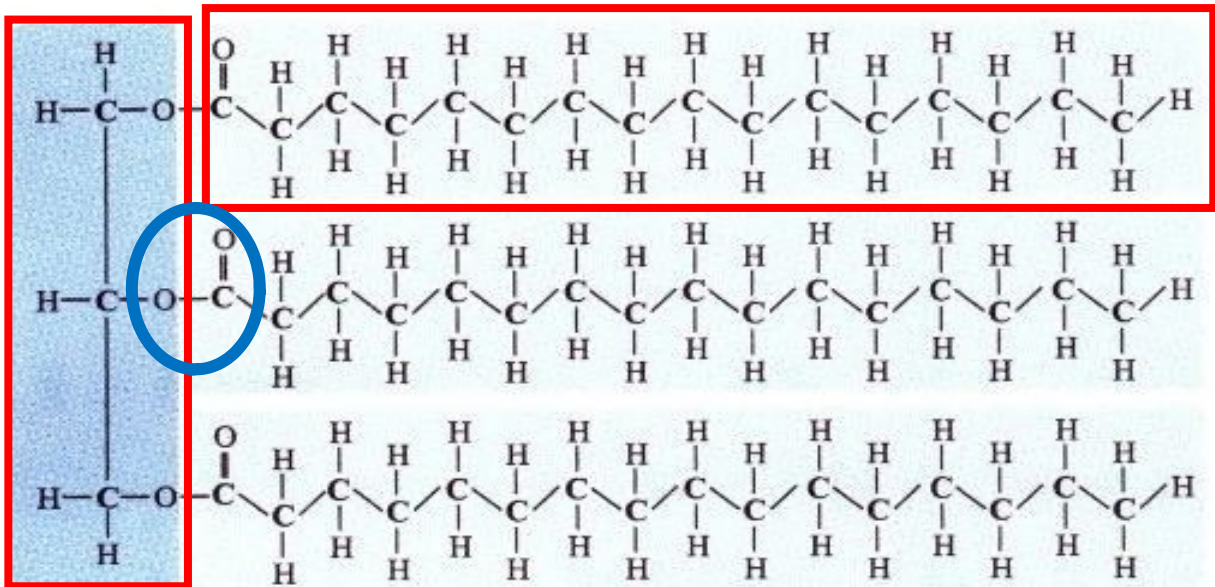
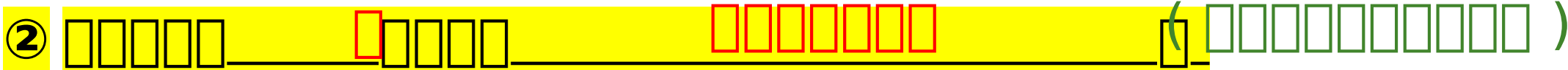
1. □□□□



$\text{N} \square \text{P}$

2. □□

(□□□ $\text{H} \square \text{O} \square$)



□□□ $\text{C}_6\text{H}_{12}\text{O}_6$

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$\text{H} : \text{O} =$



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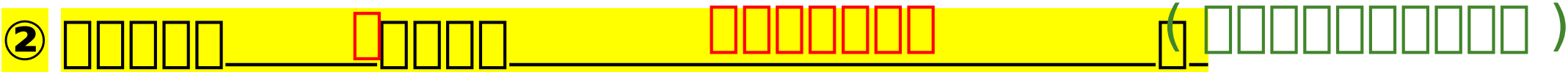
1. □□□□



N □ P

2. □□

(□□□ **H □ O □**)



3. □□□□

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①   **C**  **H**  **O**

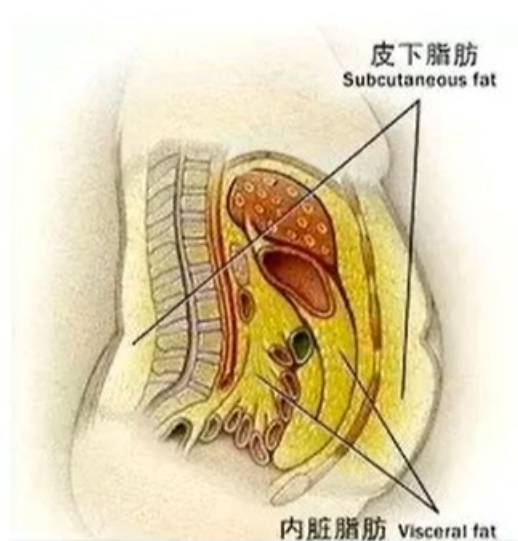
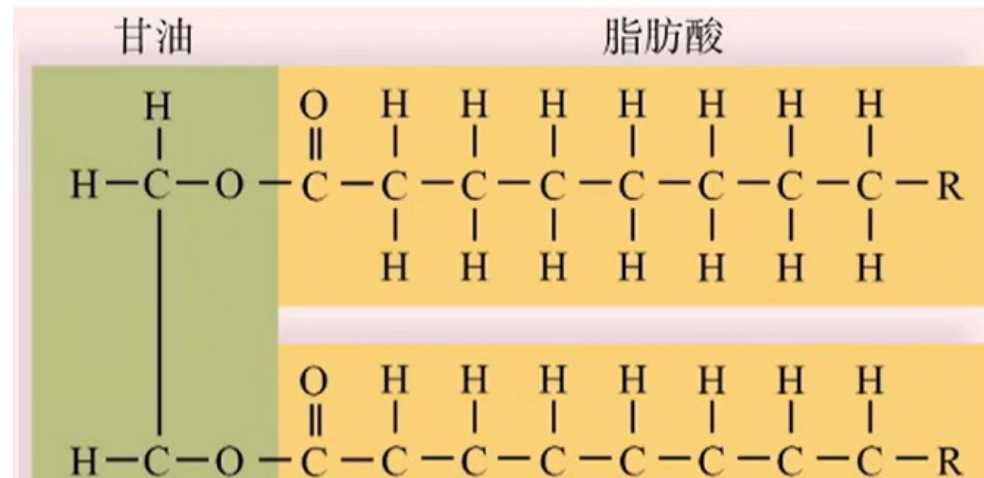
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③

a. □□□□□□□□□;

b. □□□□ ;

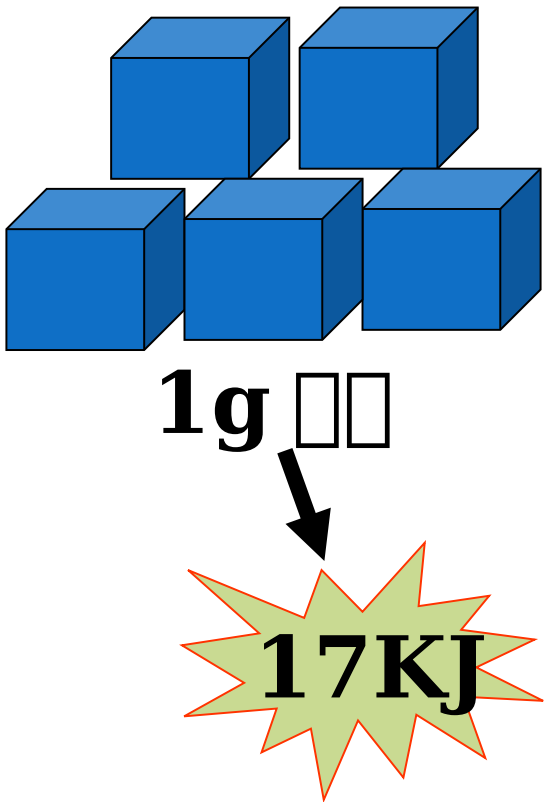
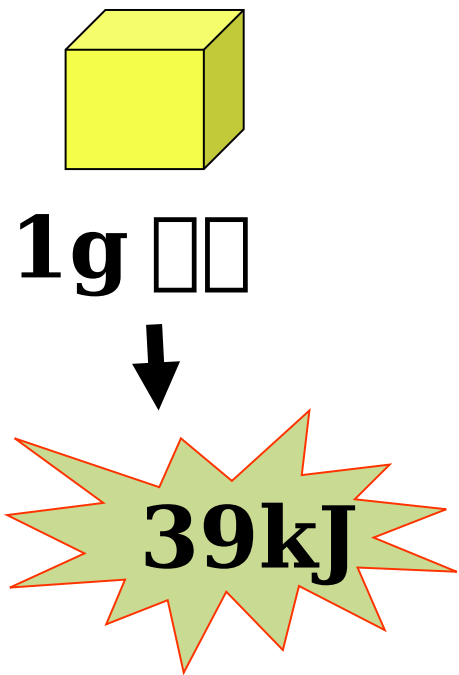
C. □□□□□□□□□□□□

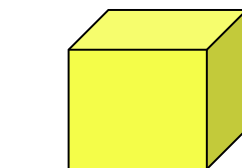




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脂肪储能 VS 糖原储能

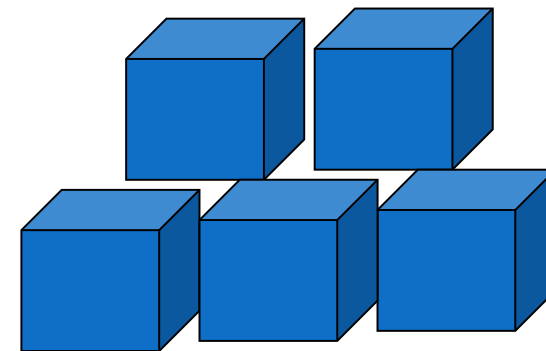




1g □□



39kJ

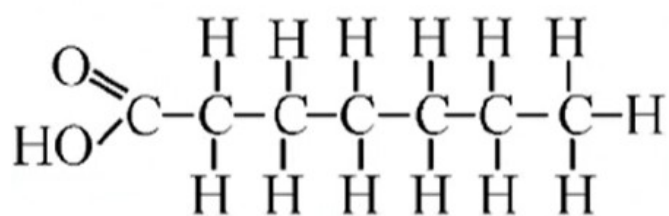


1g_



17KJ

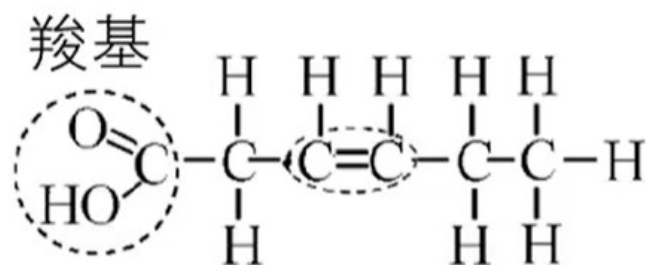
饱和脂肪酸 VS 不饱和脂肪酸



饱和脂肪酸



动物脂肪大多数含有饱和脂肪酸，熔点高，容易凝固，在温室时呈固态，如猪油。



不饱和脂肪酸



植物脂肪大多数含有不饱和脂肪酸，熔点低，不容易凝固，在温室时呈液态，如日常炒菜用的食用油（花生油、豆油和菜籽油等）

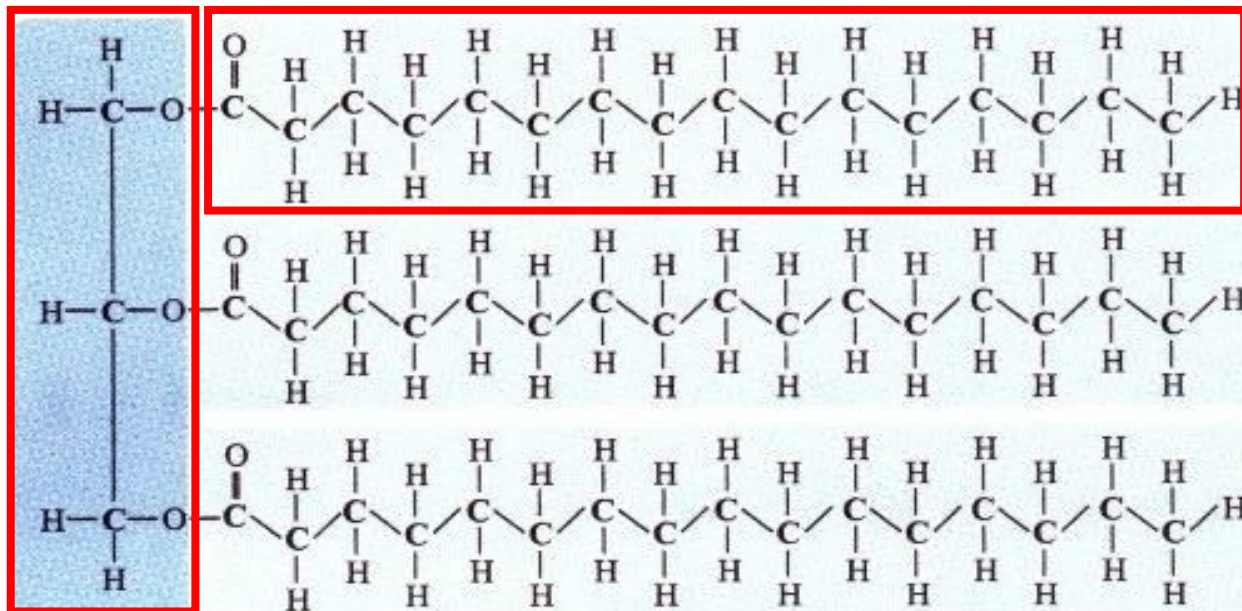
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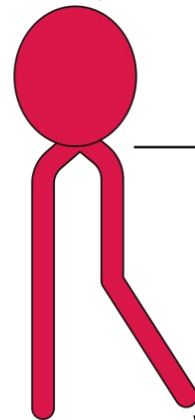
C H O N P

②



(26)

磷脂分子



(42)

1000

2

①

C □ H □ O □ N □ P

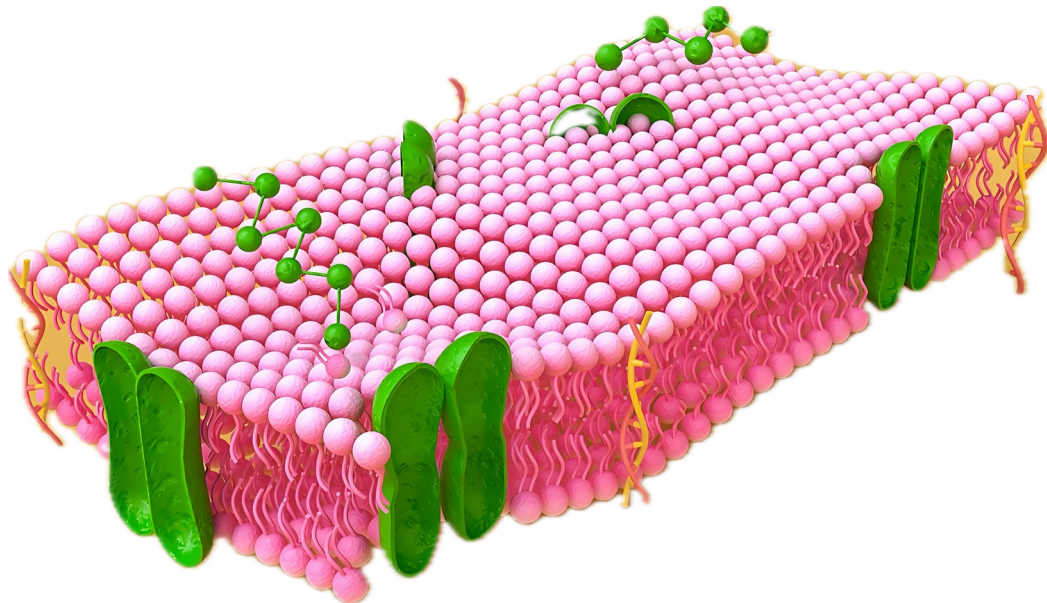
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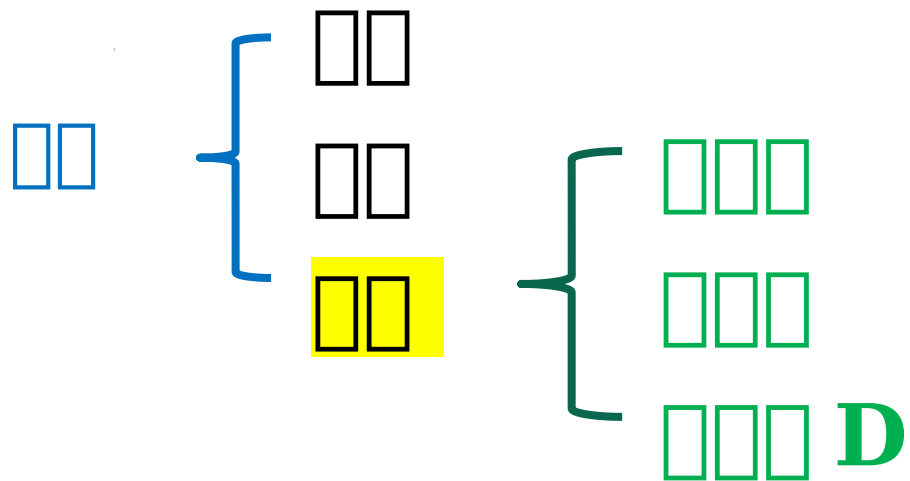
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③

[illegible]

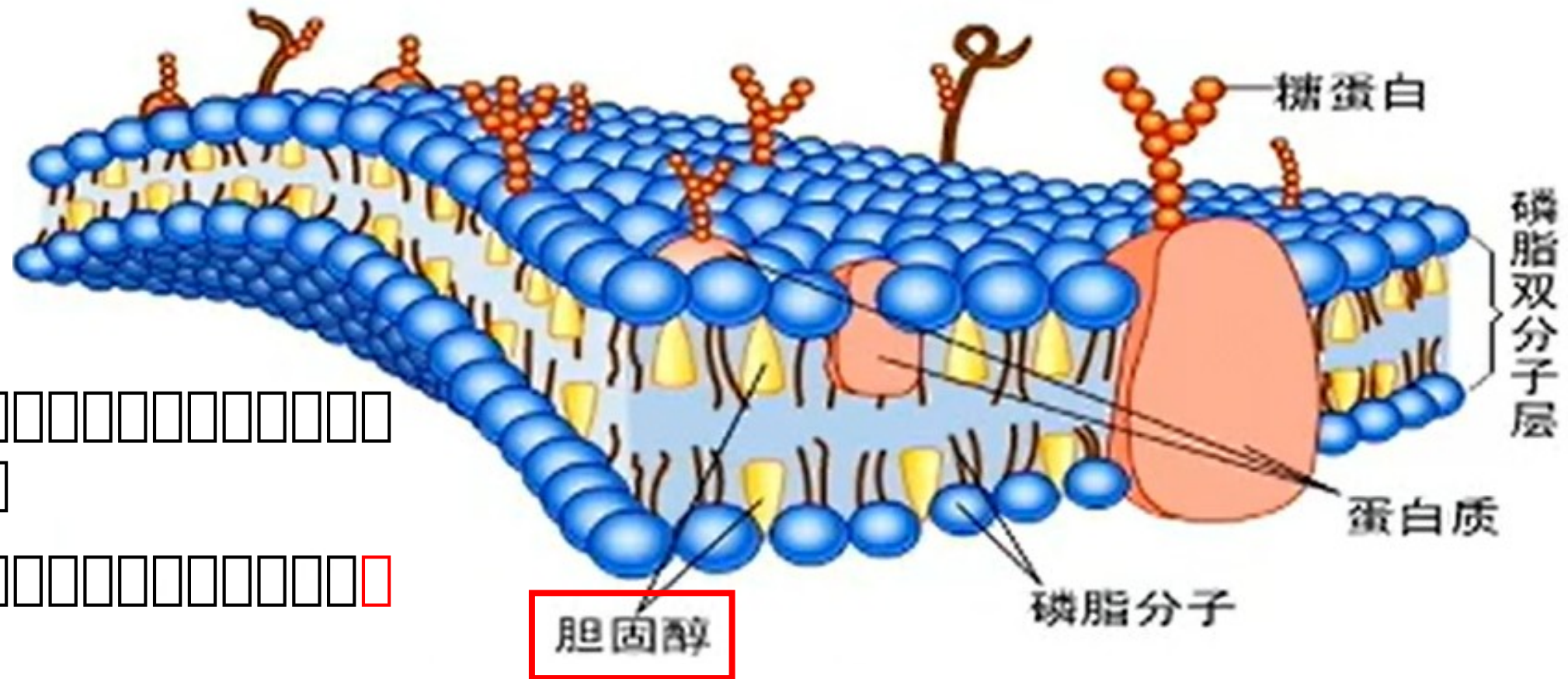
④

[illegible]



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□ □ □ C H O	□ □ □	①	□ □ □ □ □ □ □ □ □ □ □ □
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➤ □□□□□□□□□□□□□□□□□□□□
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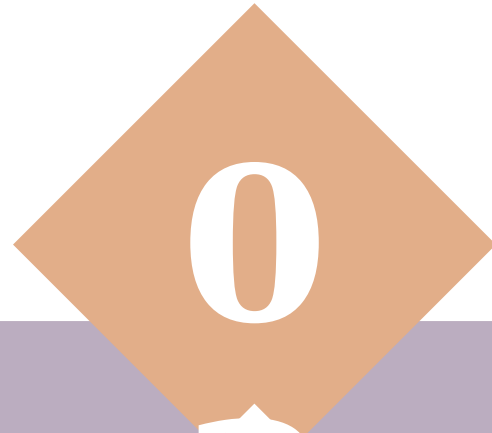
正常血管



堵塞血管



□ □		□ □	
□□ □ C H O	□□□	①	□□□□□□□□□□
	□□□	②	□□□□□□□□□□
	□□□ D	①	□□□□□□□□□□□□□□□□
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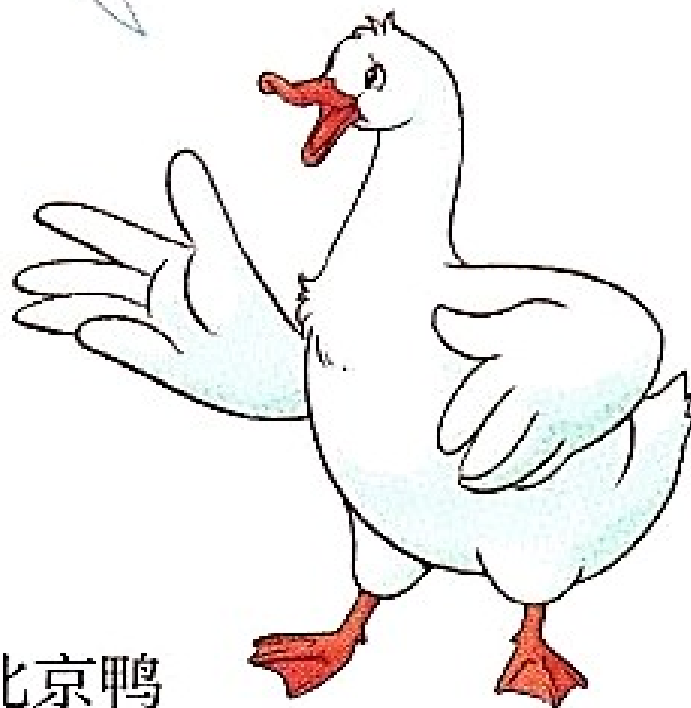


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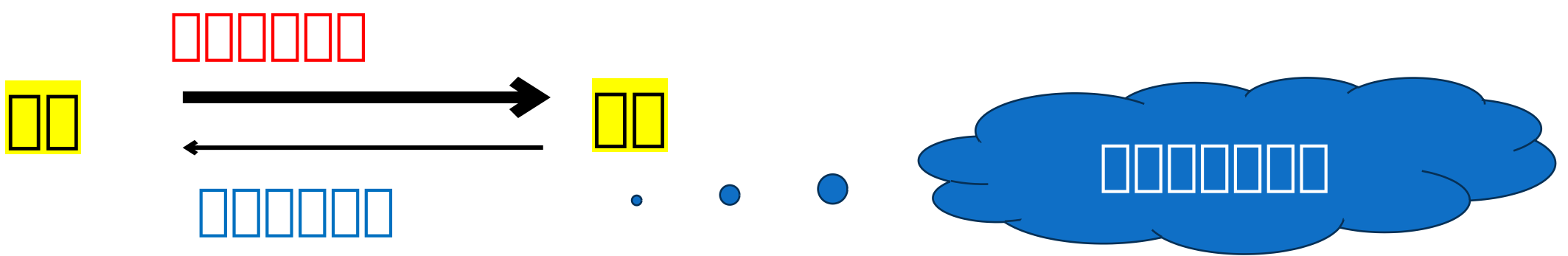
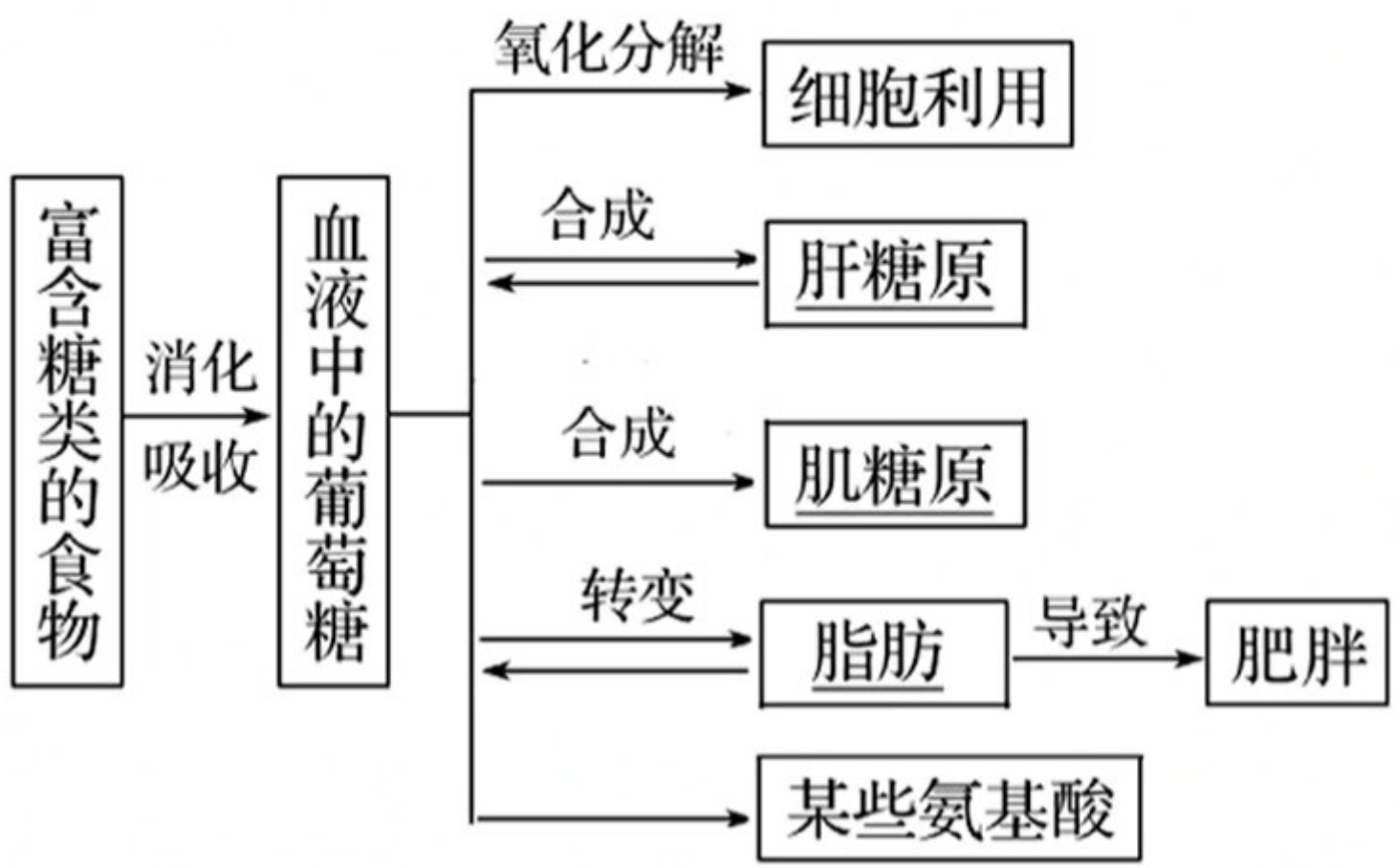
我每天吃的都是一些玉米、谷类和菜叶，为何长了这一身的肥肉？

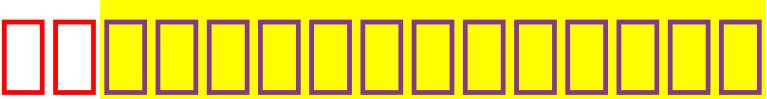


北京鸭



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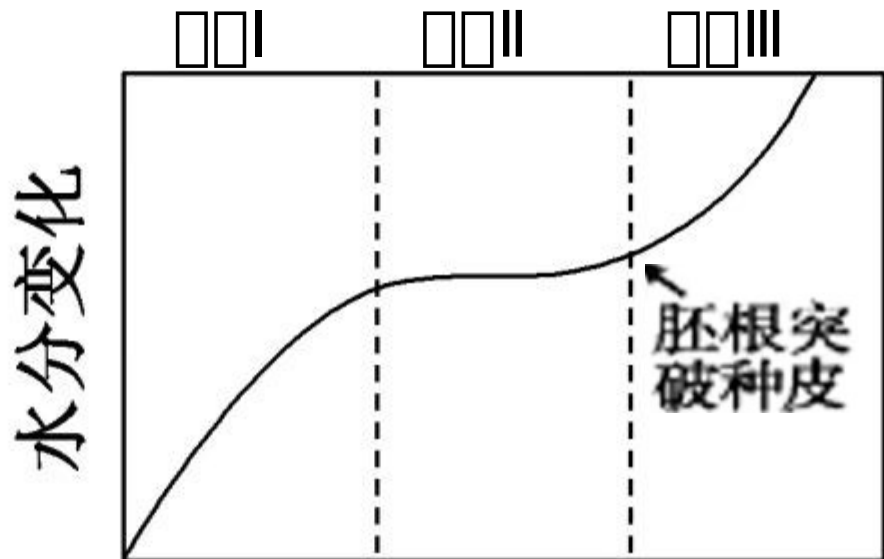


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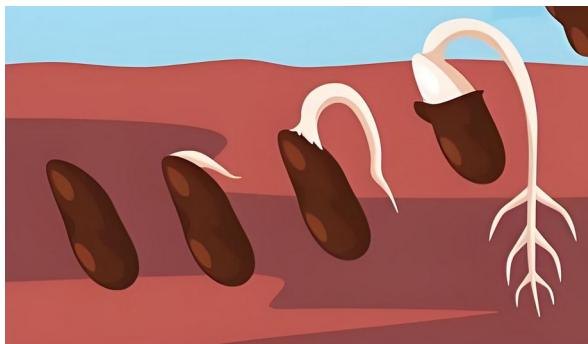
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□□	□□	① □□□□□□□□□□ □□□□□□□□□□ ② □□□□□□□□□□□□ □□□ H □ 0 □□□□□□□□□□□□□□ 0 □□□□□□□□



2 □□□□□□□□□□□□□□□□

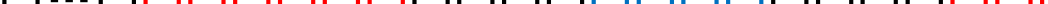


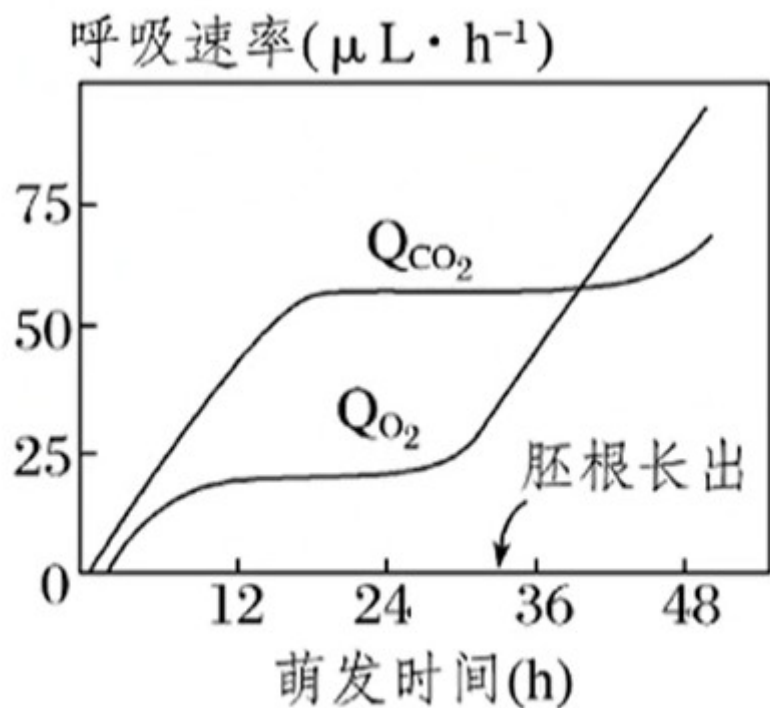
种子萌发过程



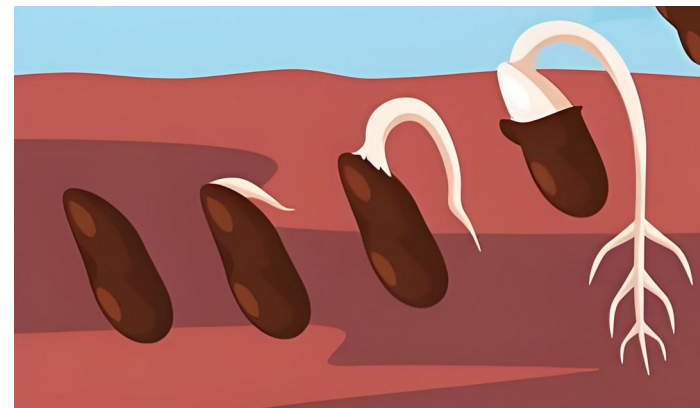
① 

② 

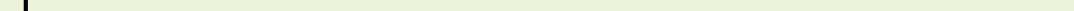
③ 

[illegible]

注： Q_{CO_2} 表示单位时间 CO_2 释放量
 Q_{O_2} 表示单位时间 O_2 吸收量



A diagram of a 1D lattice with 11 sites. The first 6 sites are black, and the last 5 sites are red. An arrow points to the first site.



□□□□□□□□□□□□□□ O_2 □□□□□ H_2O □□□□□□□□
 □□□□□□□□□□□□□□

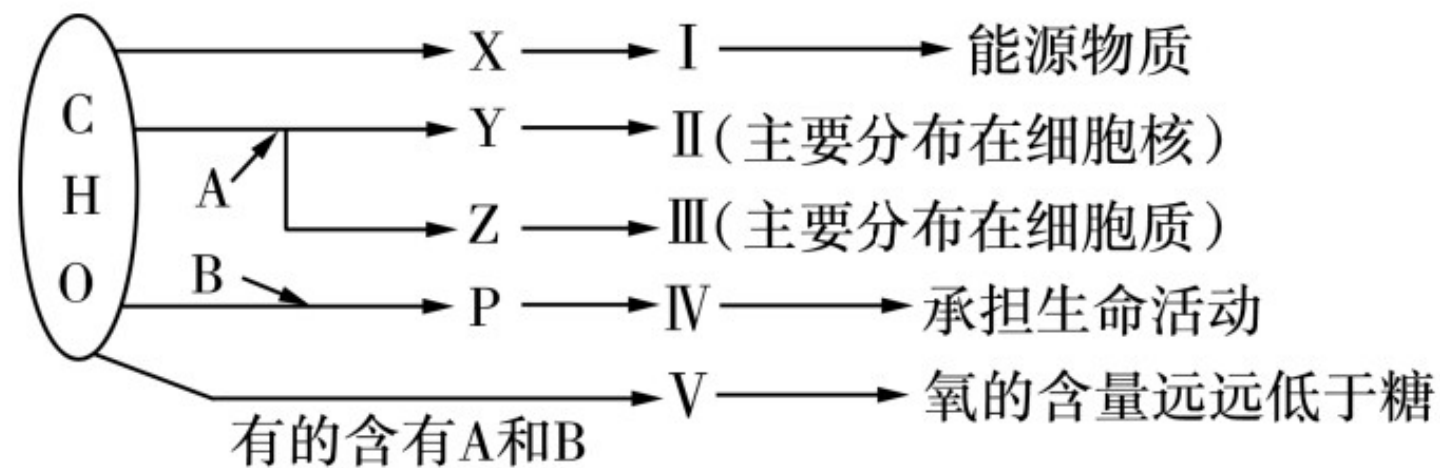


图1

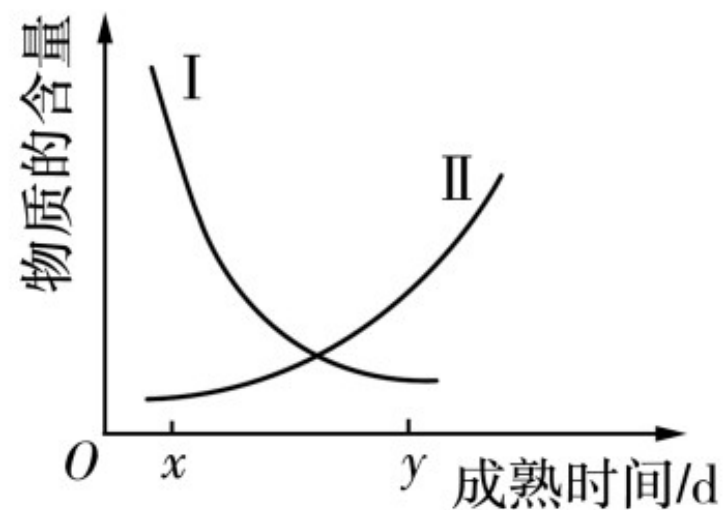


图2

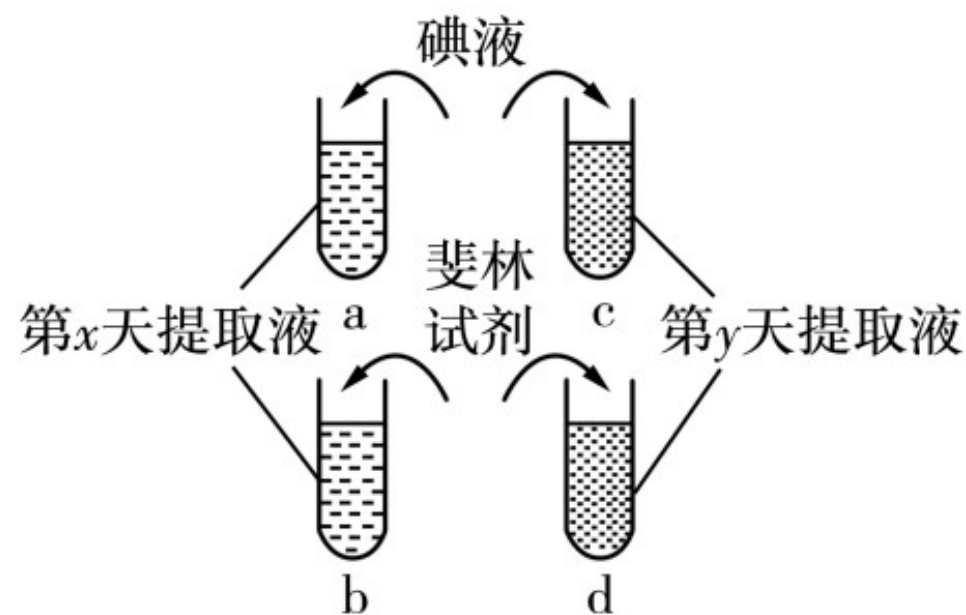
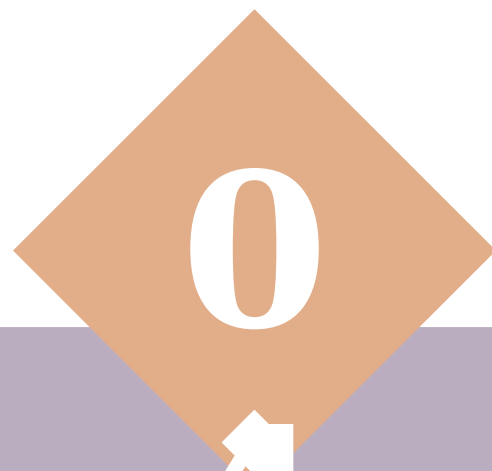


图3



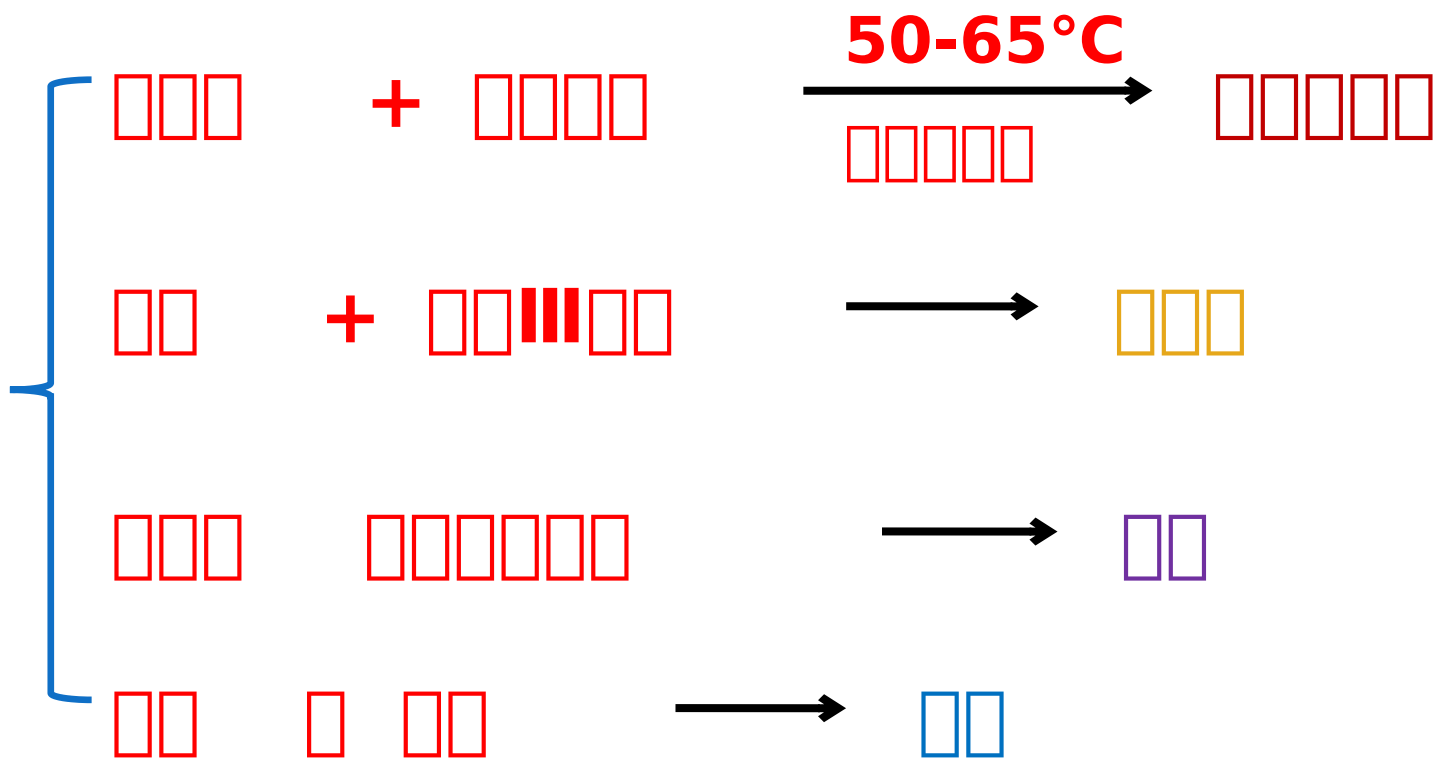
4





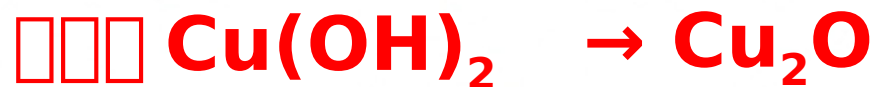
一、原理

某些化学试剂能够使生物组织中的有关有机化合物产生特定的颜色反应





1. 原理: 还原糖 + 斐林试剂 $\xrightarrow[水浴加热]{50\sim 65^{\circ}\text{C}}$ 砖红色沉淀

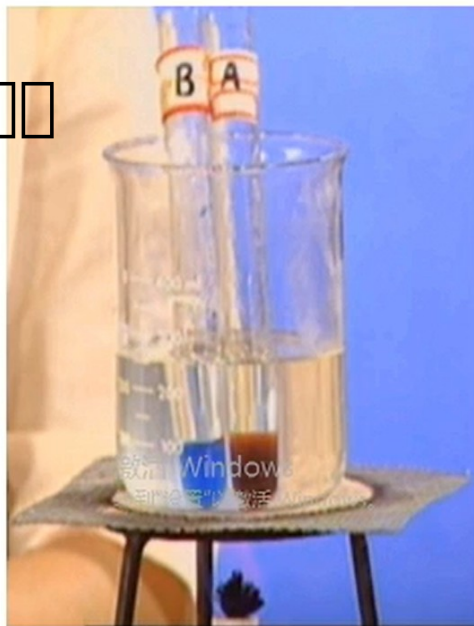


- ① 
- ② 

- ①
- □ □ { □ □ □ 0.1 g/mL NaOH □ □
□ □ □ 0.05 g/mL CuSO₄ □ □
- ②
- □ □ □ □ □ □ □ □ □ □ □

2. 实验材料

苹果或梨匀浆 □□□□□□□□□□

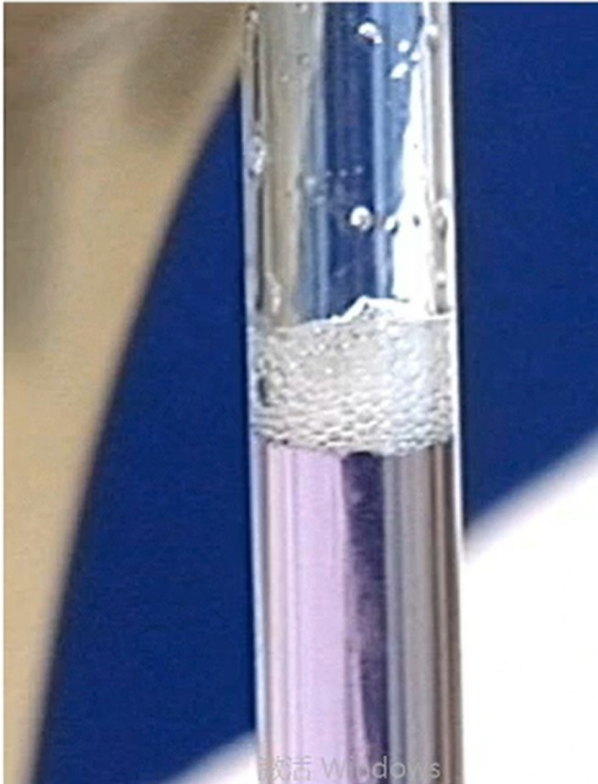
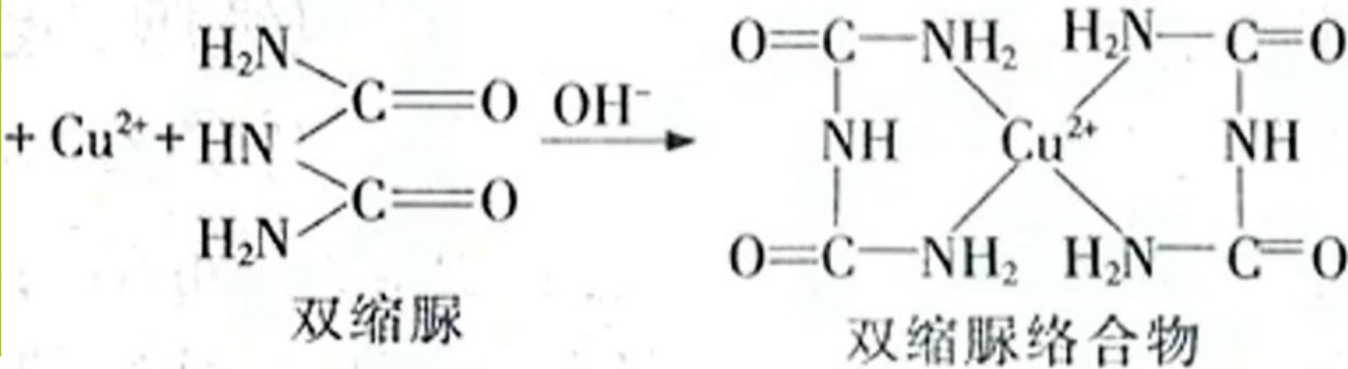




☐ ☐ ☐ ☐ ☒ A ☐ B

A **0.1 g/mL NaOH**

B **0.01 g/mL CuSO₄**

[illegible]

	試料		試料	
	試料	試料	A 試料	B 試料
試料	試料 0.1g/ml 試料 NaOH 試料	試料 0.05 g/ml 試料 CuSO ₄ 試料	試料 0.1g/ml 試料 NaOH 試料	試料 0.01 g/ml 試料 CuSO ₄ 試料
試料 試料	試料		試料	
試料 試料	試料		試料 A 試料 1ml 試料 試料 B 試料 4 試料	
試料 試料	50-65 °C 試料		試料	
試料 試料	試料		試料	

試料
試料
試料

試料
試料

試料 **Cu(OH)₂**

試料 **Cu²⁺**



四、脂肪的鉴定

1. 实验原理：脂肪+苏丹Ⅲ染液 $\xrightarrow{\text{镜检}}$ 橘黄色
2. 实验材料：花生种子（浸泡3~4h, 去掉种皮）

3. 实验步骤:

方法一：花生种子匀浆+3滴苏丹III染液 → 橘黄色

方法二：

取材 花生种子（浸泡过的）将子叶削成薄片

制片

①取最理想的薄片，放在载玻片中央

②染色：在薄片上滴2~3滴苏丹III(或苏丹IV)染液，染色3 min

③去浮色：用1~2滴体积分数为50%的酒精溶液

④制成临时装片：滴1滴蒸馏水，加盖玻片

观察

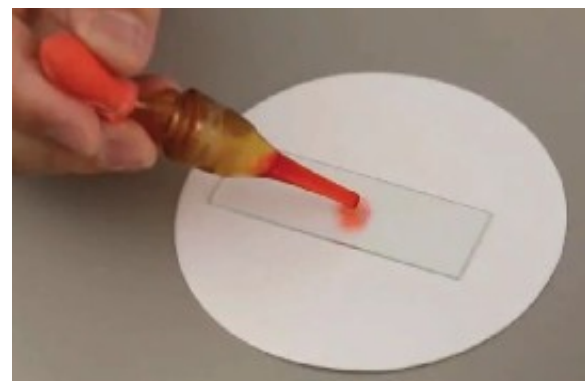
在低倍显微镜下找到已着色的圆形小颗粒，然后换高倍显微镜观察

结论

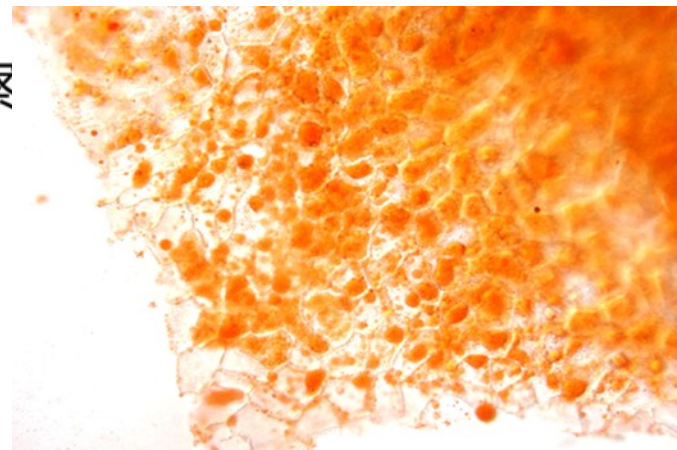
圆形小颗粒呈橘黄色，说明有脂肪存在

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五、淀粉的鉴定

1. 实验原理：淀粉+碘液————→蓝色
2. 实验试剂：碘液
3. 实验材料：马铃薯匀浆
4. 实验步骤：
 1. 向试管内注入2mL待测组织样液；
 2. 向试管内滴加2滴碘液，观察颜色变化。

